



The GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society
October 2019 <http://www.gars.org/> Volume 28, Issue 10



Massive Homebrew Show and Tell, Tuesday, October 8, 2019 7:00 pm at EAA Hangar



For some reason these pictures don't seem right...

Message from the President

Are we hurting GARS by supporting the Alford Memorial Radio Club Hamfest next month at the Gwinnett Fairgrounds?

Absolutely not and for many good reasons. First and foremost, the AMRC Hamfest (or as we all call it, the Lawrenceville Hamfest) is an excellent Hamfest right in our backyard. For years, it has been the largest Hamfest in Georgia and continues to get better each year. Being close to home, it allows us to easily visit for more than one day, roam the Boneyard for bargains, shop with the dealers, attend an informative Forum and visit with friends we haven't seen since the last Hamfest.

Many have said that Hamfests are declining with each year. Yes, many smaller Hamfests are not doing as well because dealers, especially the larger ones, have limited the number of events they will travel to each year. With the ease of buying online, why leave home to roam the aisles looking for the next bargain? We are fortunate to have a Hamfest close by that is trying to grow and offer more to the Ham community.

That gets me to the second and very important reason to support and attend this Hamfest. It takes a lot of volunteers many hours to plan and pull off a successful Hamfest. That requirement puts a strain on the resources of even the largest clubs. Several years ago, the leadership of the Alford Memorial Radio Club made the decision to grow this event, but realized it may take more than the available resources of the club.

AMRC approached GARS to assist and we responded well. As the relationship continued, GARS members were asked to take on some leadership roles and again responded to assist. For our participation, Alford has shared the Hamfest's success with GARS. Each year GARS members have volunteered



"...there are many benefits to GARS and its members by supporting, volunteering and attending a successful Hamfest."

alongside Alford members to make the Hamfest a success.

What is Alford doing for the Hamfest? Each year, the club leadership at Alford has done many things to improve and grow the Hamfest from traveling to other Hamfests to seek out and invite new vendors, promote the event to increase attendance and increasing the number of interesting and informative Forums.

To answer the original question, there are many benefits to GARS and its members by supporting, volunteering and attending a successful Hamfest. Just because we are different

clubs, we are not in competition and should all work to make Amateur Radio an enjoyable activity. This is a great example of how two clubs can work together for a common goal.

If you have not yet signed up to volunteer for the Hamfest, please consider doing so. Taking a few hours of your time to help out will leave many more hours to enjoy a great event so close to home.

See you at the Hamfest on November 2nd and 3rd!

73,

A handwritten signature in black ink, appearing to read "John Adams".

WB4QDX, Club President

"It is not the class of license the Amateur holds, but the class of the Amateur that holds the license."

[Author Unknown]

GARS October Meeting and Workshop

Massive Homebrew
Show and Tell

By Randy Collins, N4COR

Tuesday, October 8, 2019 7:00 pm

Massive Radio Go Boxes -
Show and Tell, Ask and Build

by Ed Woodrick, WA4YIH

Tuesday, October 15, 2019 7:00 pm

Sports Aviation Complex—Hangar 1

690 Airport Road

Lawrenceville, GA 30045

NOTE: Location Entrance to the Hangar has changed! See below link for more details!

[Updated Entrance Directions to EAA Hangar](#)

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GARS Communications

2 Meter Repeaters

147.075(+) MHz Tone 82.5
147.255(+) MHz Tone 107.2

1.25 Meter Repeater

224.580(-) MHz Tone 100.0,
1.6 MHz Offset

70 Cm Repeaters

444.525(+) MHz Tone 82.5
442.100(+) MHz Tone 100
442.325(+) MHz Tone 100

6 Meter Repeater
53.110 (-1 MHz) No Tone
(Offline for Maintenance)

Other Resources:

APRS
144.390 -- 1200 Baud
W4GR

D-STAR
WD4STR
145.060 + (1.4 MHz)
440.550 + (5 MHz)

**Don't forget
to support our
advertisers at the
back of the
GARzette.**

Snail Mail Address:
GARS
P.O. Box 492531
Lawrenceville, GA 30049

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Norm Schklar, WA4Z XV who prints copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the news letter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org>

Newsletter Editor: editor@gars.org Bill Eggers—WB2RIS 470-238-9603

GARS Happenings

20 Years ago in the October 1999 GARzette:

- This month's "On The Air" by Karl Phillips, K4GZZ, features Clarence Upthegrove, AJ4S;
- A Special Election will occur during the October 1999 meeting to elect a new Club Secretary;
- The 1999 Christmas Party is to be held December 10 at the Suwanee Holiday Inn;
- It is reported one of the stars of the new show "Third Watch" may portray an amateur radio operator on the show;
- A web page at www.wm7d.net/azproj.shtml is introduced that will display a map of beam headings to DX stations from your home QTH (now www.wm7d.net/azproj.shtml);
- Ike Chapman KE4GYM discusses "Of Race Cars and Radios";
- Another successful Dog Show fundraising event was reported, along with some photos.



You can always browse the GARzette archive at <http://www.gars.org/newsletters>

73, *Bill*, WB2RIS, GARzette Editor

Jamboree On The Air (JOTA)

October 19th from 9:00 AM – 3:30 PM at
VFW Post 5255, 368 Grayson Highway, Lawrenceville, GA
30046

For directions please see [map](#).

This a free event that is open to all Cub Scouts, Boy Scouts, Ventures, Sea Scouts, Girl Scouts & the general public. We will be offering a Radio Merit Badge Class at JOTA.

[Register now for Class.](#)

Come learn and have fun at JOTA 2019.

JOTA is an annual Scouting event that uses amateur radio to link Scouts around the world, around the nation, and in our own community. Scouts of any age can participate, from Cub Scouts to Boy Scouts, Venturers and Girl Scouts. This is the official JOTA site of the Northeast Georgia Council Amateur Radio Club KK4BSA.

For more information on what's going on at JOTA please visit <http://www.gars.org/gars/boy-scouts-jota/>

Sponsored By:
Gwinnett Amateur Radio Society, Gwinnett ARES, Venture Crew 73, NEGA Amateur Radio Club

For instructions on how to upload photos go to
<http://www.gars.org/gars/boy-scouts-jota/>

GARS HELP WANTED

- GARzette Editor — Looking for someone to become the next GARzette Editor, starting off as a GARzette Committee member / Assistant Editor. Experience with Microsoft Publisher would be nice, but any experience with Microsoft Office products is helpful. Most of the content is supplied by others, but occasionally you may wish to write content, especially in your area of expertise. If you are interested, please contact Bill Eggers, WB2RIS at editor@gars.org.

Thanks to Joe Biddle, AD4PZ, for taking over as Winter Field Day Chair!

Thanks to Dave Slotter, W3DJS, for taking over as Georgia QSO Party Chair!

If you're interested in volunteering for one of these positions, please contact one of the GARS Officers. Supporting GARS activities is an important part of what we do and help from club members is needed.

[PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome.— Ed.]



We inadvertently showed 31 days in September for the GARS Calendar. [Sorry —Ed]

Stone Mountain Hamfest



WHERE AND WHEN

Gwinnett County Fairgrounds
2405 Sugarloaf Parkway
Lawrenceville, GA 30045

855-786-8643

Nov. 2-3, 2019

Sat: 8 a.m. - 4 p.m.

Sun: 8 a.m. - 2 p.m.

8.00 admission via website. \$10 admission at the gate!!

Bone Yard Tailgating space \$10.00.

Flea Market Tables!!!

Commercial Tailgate Specials

VE Test Session Walk-ins Only Registration 9:00am Testing 9:30am

Information and Table Reservations: Steve N4TTY

855-786-8643

FORUMS: 2 EDUCATIONAL TRACKS

Track 1. "Emergency Communications".

Track 2. "Amateur Radio for New Hams"

Contest: Go Box Contest 3rd yr. (Click to signup)

Largest Flea Market and Boneyard with over 300 spaces

**Largest & Only 2 Day
Hamfest in Georgia**

Among those Vendors
and Exhibitors to be at
the 2019 Stone
Mountain Hamfest are:

- [American Radio Relay League](#)
- [Ham Radio Outlet](#)
- [Icom America](#)
- [Ham World](#)
- [JMR Sales](#)
- [Kenwood USA](#)
- [Max-Gain Systems](#)
- [Giga Parts](#)
- [Paradan Radio](#)
- [The Sign Man](#)
- [The WireMan](#)
- [Tower Electronics](#)
- [Wolf River coils](#)
- [HamRadio.World](#)
- [North Georgia GMRS](#)
- [Orlando HamCation 2020](#)
- [Gwinnett Amateur Radio Society](#)
- [North Fulton Amateur Radio League](#)
- [Atlanta Radio Club](#)
- [RT Systems](#)
- [DX Engineering](#)
- [ALUMA Tower](#)
- [TN07](#)
- [SteppIR](#)

The Mike Mic

A Universal Microphone Adapter for Ham Radio.

By J.T. King, K4GOM. Used with Permission

The Mike Mic is a very simple universal microphone adapter that allows Hams to adapt just about any dynamic or condenser microphone for use with their transmitters. Plug and play.

The project first requires a check of the impedance we are dealing with. Modern radio manufacturers have settled on the average microphone input impedance of 600 ohms. Typical dynamic microphones can have impedances between 250 to 1000 ohms. Better performing mics are in the 250 to 600 ohm range. Most dynamic microphones in this group have balanced XLR type connectors requiring the XLR family of connectors which we will need to use in our project. This, of course, goes for you condenser mic fans.

The next step is to provide a circuit to isolate the very low signal level from the very high RF field that we encounter around transmitters. The transformer is always the simplest route to take but not always the cheapest. However, in our case, the transformer is both the cheapest and the best choice for simplicity. Most any small 600 ohm 1:1 transformer will work. I chose one (see the parts list) that is common, inexpensive, but not shielded, therefore requiring a metal box to put it in since we are in a high RF field environment. This transformer circuit will allow most 250 ohm, up to some 1K ohm mics to work with most modern transmitters while providing full isolation.

We must also think about isolating the “ground” as well. Being able to isolate the microphone ground gives us more flexibility in plugging in other devices, such as an audio mixer of some type by eliminating a possible ground loop. We will need to add the ability to “lift” the ground if needed. This could be a jumper on the board or even a switch on the box. The switch would be necessary if changing from just a microphone to an audio mixer for example.

The radio input is unbalanced. We are going from balanced to unbalanced. This makes it even more important to pay strict attention to grounding principles and make use of an isolation transformer.

Let us add the PTT jack to our project as the radio’s connector has that input and we might as well add that to the box for convenience. So we will need a mono ¼” phone jack and a female XLR mic jack in addition to our audio transformer. Let’s add the two 3.5mm mic and headphone jacks for a headset. With this set up, we can plug in just about everything we can think of without having to spin off the connector on the radio.



The final circuit board layout has RF bypass capacitors added. Any ceramic disc capacitors in the 60 pF to .01 µF range will work. C2 bypasses the XLR Pin 2 hot + to power ground. C3 bypasses XLR Pin 3 hot – to power ground. C1 bypasses the radio mic output to the radio power ground. I would add a 60 pF cap in C1 (Exact value not real critical). Note that “Power Ground” is the PTT ground and is also the power ground for voltage that appears in the mic connectors on most transmitters. The Mic ground is a separate ground, usually a few ohms above chassis ground for the mic shield.

Project details

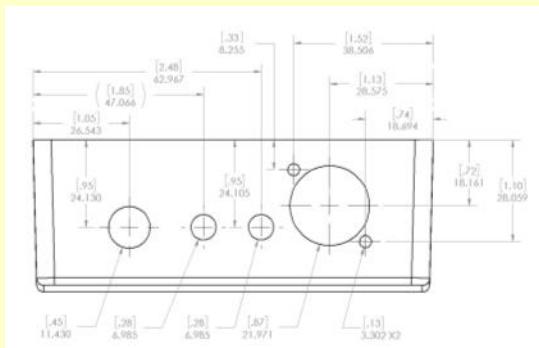
We start the project by either making our own circuit board or ordering one. The board is 2.25” by 3.25”. We then order the parts we need. See the parts list for details. (The parts list has sources for all the components you will need.) You may feel free to do your own thing as the project is simple and there are many ways to accomplish it. The board jack layouts are for the Neutrik connectors. The Neutrik NCJ6FAH Female XLR Jack is special for this project as you will see later. Install the jacks on the board first and then install the transformer last. I would use hot glue around the transformer to keep it from moving as the wires are quite small and do not offer strong support. Next, using the template drawing supplied, center punch the face of the box for the holes for the jacks. I used a dial caliper to scratch little X’s then center punched each X. Drill small pilot holes first. A must have tool for every ham can be purchased from Harbor Freight, Item# 96275, a set of high speed steel step bits. These bits make short work of making Jack holes in boxes without a lot of trouble. Clamp the box firmly, turn the bits at high speed but drill down slowly letting the bit do the work. Stop often and check your results . Don’t go too far.

(Continued on page 7)

The Mike Mic (Cont'd)

(Continued from page 6)

Next, figure out the size hole you need to drill for the cable to go out the rear of the box. I found a small diameter cable that had a foil shielded two conductor cable along with two unshielded wires in the same jacket. You can use what you already have. I used the two conductors in the shielded cable for the mic and voltage. The two unshielded wires were then used for the PTT. Next, I used a rubber grommet and installed it after drilling the hole big enough to easily install it. To connect the headphone, I took an old broken headphone with a good cable and cut it off at the headphone. I plugged it into the radio's front panel jack and cut the other end to be the same length as the wire from the box to the radio mic jack. I drilled a second hole on the back of the box near the other cable hole and put a grommet in. I wired it to the HP OUTPUT pads on the circuit board. Tie wrap the wires to the circuit board to hold the wire in the box.



After soldering the wires on the board, I installed the board in the box. I put the two screws in the XLR jack and the nut on the phone jack. The other jacks just poke through their holes. That is all that is necessary to hold the circuit board in place. Next, I soldered the appropriate Foster connector on the other end of the wire to match my radio using the radio's wiring diagram in the radio's manual (8 pin Foster Connector). Before screwing the lid on the box, plug the device in and check to make sure it is working correctly, then put the cover on and you are done. Just that simple.

Additional thoughts

You will have noticed by now that the chosen XLR connector has both a $\frac{1}{4}$ " ring tip sleeve jack as well as an XLR jack built in. Yes, the way the jack is wired, you may use either type plug in that jack increasing the versatility. The ground lift jumper is missing in our project, meaning that the "ground is lifted", completely isolating our microphone balanced circuit from the unbalanced circuit going to the radio. In most cases, that will work correctly, so only put a jumper in if necessary. I did not include a switch as most of the time you would not put that jumper in. On some commercial audio isolation boxes, called a "Direct Box", there is a switch to ground or un ground the connection. Should putting in the jumper create a ground loop, you will notice a loud 120/60 cycle hum in the audio. In that case, remove the jumper. You can put a simple push on push off switch in for that if you tend to use an external mixer.

When making your own XLR cables, resist the temptation to jumper the shield which goes to pin 1 to the barrel ground lug. Never under any circumstance should you ground that lug to pin 1. Grounding that lug could cause voltage to appear on the microphone body under certain conditions (phantom power) that could cause a shock if you touch the mic. The standard XLR connection is pin 1: ground or shield, Pin 2: hot +, Pin 3: hot -. The way the XLR jack is wired in our project, should you plug a mono $\frac{1}{4}$ " phone plug into the jack, the sleeve and ring will be grounded and the tip will be hot +. It should still work that way but, you now have an unbalanced input with a transformer isolated unbalanced output. That means little or no common mode rejection that would be noticeable with long unbalanced mic cables.

Important! The metal case is grounded via the screws holding J2 in place from the front.

The board has a means to power a condenser mic using the voltage supplied through the radio's mic connector. This is usually between 5 and 8 volts. In order to power a balanced mic, we included current limiting resistors on the board. I recommend using film resistors of the same value of about 1K ohms give or take. Both pins on the XLR must have voltage on them, hence the two resistors.

Though most modern dynamic microphones are not bothered with voltage on them, I included a means to switch on and off the phantom power if you choose. The Phantom Switch pads have a thin trace on the back of the board between them. Should you wish to put a switch in, you will need to cut that trace.

I noticed that my Yaesu radio mic had a 60 pF bypass capacitor inside the included mic so I elected to put the bypass capacitor in C1 on my project. I could not tell any difference in sound quality with it in or out, but, since the Yaesu engineers thought it was needed, I put it in.

In everyday use, I determined that most of you will need to put a capacitor in C2. I put a .01 μ F in C2 to take the slight background buzz out. No one else could hear the buzz, but I could hear it in the headphones.

(Continued on page 8)

The Mike Mic (Cont'd)

(Continued from page 7)

That completes our project. You can now simply plug in almost any balanced or unbalanced microphone or audio mixer into your rig with proper isolation of both signal and ground. Enjoy!

Parts List

MikeMic Board: (Available from K4GOM@yahoo.com)

T1: Daier EI14 600:600 Ohm audio transformer EAN#6921694669677 (eBay, others)

J1: Neutrik NRJ4HF Mono 1/4" phone jack (Fullcompass.com) (Does not come with nut)

Nut: Neutrik NRJ-Nut-B (Fullcompass.com) (Must order separately)

J2: Neutrik NCJ6FAH Female XLR Jack (Fullcompass.com)

J3: Kycon STX-3120-3B-701C (PINK) Or equivalent, Mouser, others

J4: Kycon STX-3120-3B-577C (Grn) Or equivalent, Mouser, others

Case: Hammond 1590S (Mouser, best price)

Misc.: two #4 Pan HD sheet metal screws, Shielded mic cable and two conductor wire for hook up to radio, Rubber grommets, tie wraps. The wire I used was West Penn #357. I think it has a new number now, AQC357. A .01 µF and a 60 pF disc capacitors out of your parts box (You can also put a .01 µF in C1 without affecting the mic sound quality). Contact K4GOM@yahoo.com

In most fields, i.e., Audio, the IEEE and the AES set wiring standards for interconnection of devices. I request that the ARRL form a standards committee to solve some of the more obvious interconnection issues found in Ham radio. You can start first by proposing a standard wiring for the mic jacks in the transmitters and transceivers. Each manufacturer uses the same Foster jacks and makes sure their wiring is not compatible with all others. It would make it far simpler to interconnect microphones and other devices if the pin outs of the jacks were standardized such as in the audio industry. The following pins commonly used, should have these suggested standard pin outs from radio to radio:

- 1.Mic hot +
- 2.DC Voltage
- 3.UP
- 4.Down
- 5.PTT hot
- 6.Rx Audio
- 7.Mic ground
- 8.PTT (power) ground

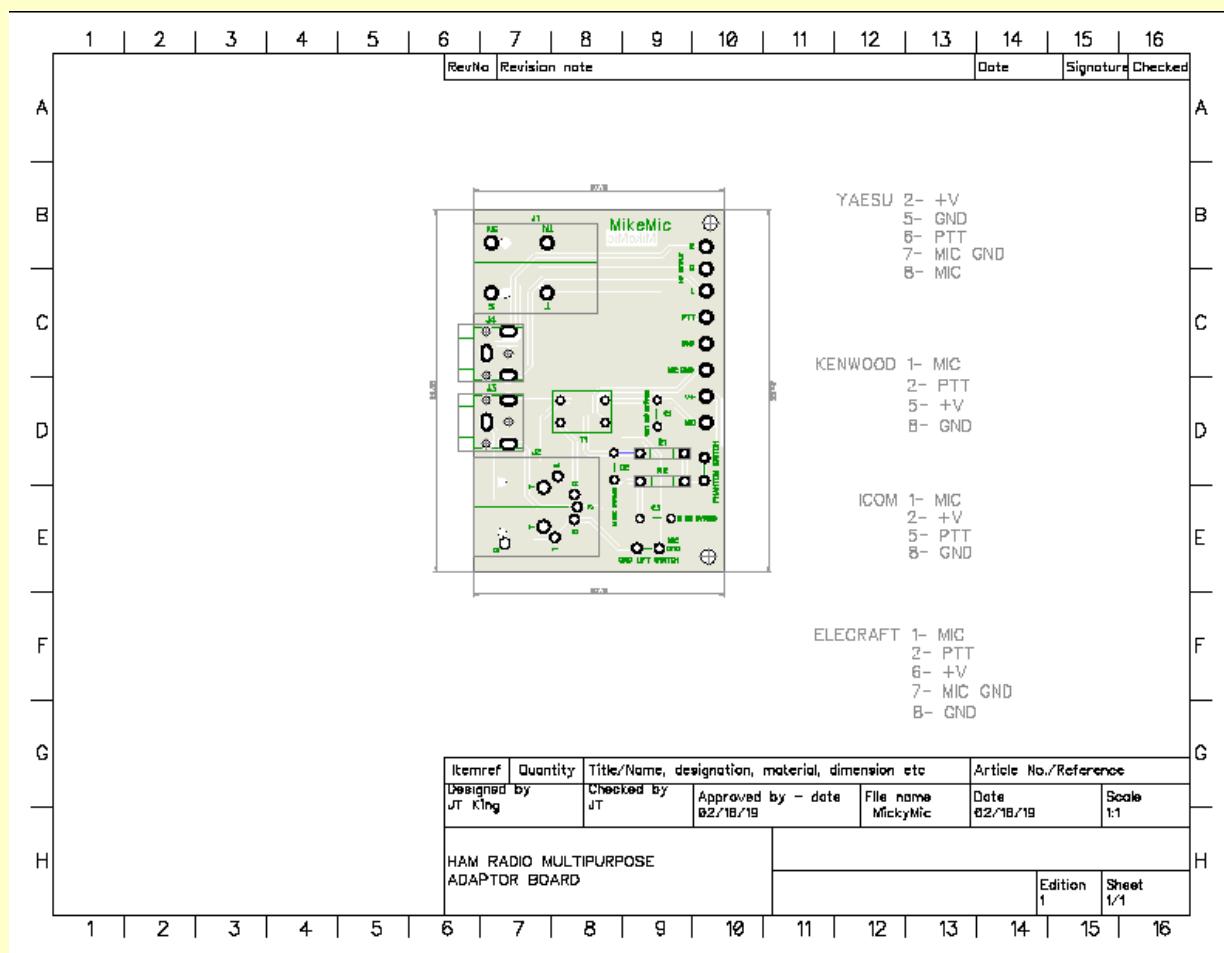
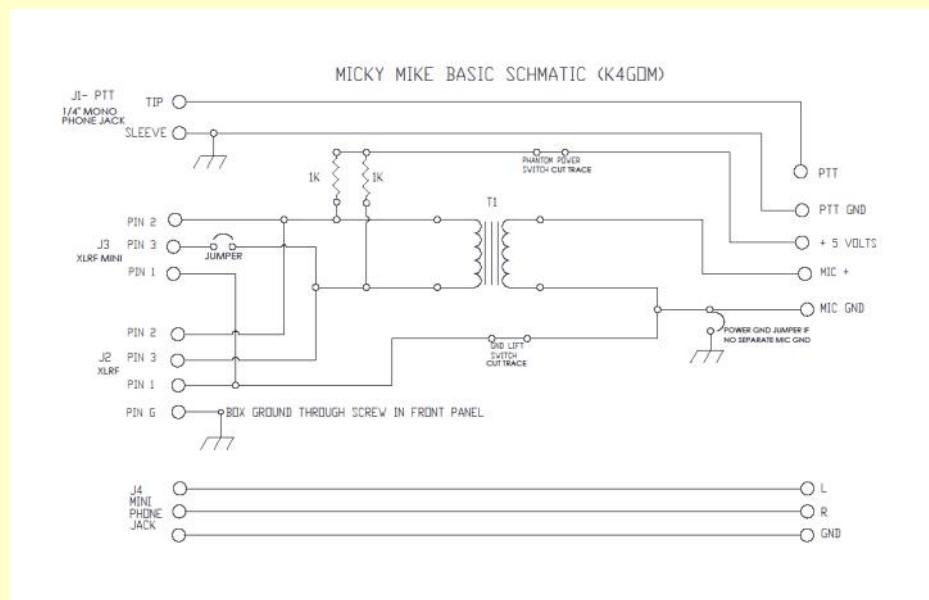
Both the RJ-45 and the 8 pin jack wiring should all be standard from radio to radio. The Jacks are standard, why not the wiring?



(Continued on page 9)

The Mike Mic (Cont'd)

(Continued from page 8)



ARRL Director / Vice Director Elections

Candidates for ARRL Directors and Vice Directors Announced
08/20/2019

Two races for the office of ARRL Director and one contest for Vice Director are set for this fall. In the Southeastern Division, incumbent Director Greg Sarratt, W4OZK, faces a challenge from Mickey Baker, N4MB. A three-way race is set for the office of Southeastern Division Vice Director, with incumbent Joseph Tiritilli, N4ZUW, facing James Schilling, KG4JSZ, and Jeff Stahl, K4BH.

The candidates are:

Southeastern Division
Director
Greg Sarratt, W4OZK
Mickey Baker, N4MB

Vice Director
James Schilling, KG4JSZ
Jeff Stahl, K4BH
Joseph Tiritilli, N4ZUW



In Divisions where more than one candidate is seeking the same position, full members in that Division in good standing as of September 10, 2019, will have the opportunity to cast ballots. Official paper ballots and candidates' statements will be mailed no later than October 1, 2019, to members who are eligible to vote.

Completed ballots must be received at the address on the envelope provided by noon Eastern Time on Friday, November 15, 2019, when ballots will be counted at ARRL Headquarters and successful candidates announced.

Source: Excerpts for Southeastern Division from
<http://www.arrl.org/news/candidates-for-arrl-directors-and-vice-directors-announced>



HAMJAM 2019

It's All About Youth!



Saturday, November 9, 2019 8:15 - 1:00pm

The Metropolitan Club, 5895 Windward Parkway, Alpharetta GA 30005

Presented by North Fulton Amateur Radio League

Endorsed by

SouthEastern DX Club, Alford Memorial Radio Club, Atlanta Radio Club, Chattanooga Amateur Radio Club,
Cherokee Amateur Radio Society, Gwinnett Amateur Radio Society, North Georgia QRP Club, Sawnee Amateur Radio Association,
Kennehoochee Amateur Radio Club, Silver Comet Amateur Radio Society

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The DX Magazine - MFJ - Diamond Antenna - LNR Precision - CQ Magazine - DX Engineering - Ham Radio Outlet

HamJam is an ARRL Affiliated Event

For more information visit <http://www.hamjam.info>

Beginner's Corner

A New Antenna for VHF and UHF Operation

I don't think I have ever promoted a commercial product in this column before, so this is a first. Disclaimer: I am not making any money off of this. This is not a commercial advertisement, but just a way to make hams aware of a new product.

I have actively promoted Summits-on-the-Air (SOTA) and Parks-on-the-Air (POTA) as a good way for hams to get out and make some contacts. However, if you are a technician class ham, you may feel left out because you have no HF privileges in the HF bands except for CW (Morse Code). Well, you need not feel hamstrung because you are restricted to 10 meters and above. Certainly, you can purchase a rig that is 10 meter capable and get on the air, but I guess very few technicians do this and perhaps fewer have the money to do so. Well, cheer up, because there may be a solution. Check out the ABREE Tacticool Ham Radio Antenna. (See accompanying video, referenced below).

This is a "blade" antenna (see right). Blade antennas are used on many military radios. They look like a painted-over tape measure, but they work.

I am a fan of the "Ham Radio Crash Course" YouTube channel. Josh, KI6NAZ just put out a review on this antenna series. <https://www.youtube.com/watch?v=KDBC0azUa50&feature=em-uploademail>. He did some testing on several ABREE antennas, and had very good results. One of them is 42 inches long. It might be a bit unwieldy, but according to the review, it did very well. Forty-two inches may be a bit too much for some hams, but there are shorter versions, also.

Even if you use another antenna, (Even the stock antenna will give you some results.) you will likely have numerous contacts. Just let others know before you go.

Back to SOTA and POTA. Being on a summit gives you the effect of having a really antenna. With an antenna that has some gain, you can get your signal out a long way. Take, for instance, Brasstown Bald. It qualifies for both SOTA and POTA. All you need to do is announce your presence on the proper posting websites (For example. POTA.us) with the frequency you are working and you are just about guaranteed contacts. I can testify it is a lot of fun.

I have heard of one SOTA activist who was able to contact Metro Atlanta from Brasstown Bald on two meters. By the way, I saw a YouTube video where one ham went to a summit with his wife a few hundred feet away. His wife returned his call. They then switched places. They chased and activated each other. Apparently, it is not against the rules, so why not take a ham friend or spouse with you when you go.

Brasstown Bald is a national park and counts for a POTA activation, as do all national and state parks. Can you activate parks on two meters? I checked the POTA activation site and found one ham doing just that. Even doing that from a local location such as the Chattahoochee National Recreation Area can be activated on two meters. Many hams have a mobile rig in their vehicles. Just park in a parking lot in the park and try it. Again, let people know you will be activating the park. A couple posts on the Metro Atlanta area reflectors would certainly help.

Breaking News: There is another "blade" antenna made by HYS, called the AC-80, which provided excellent coverage to the GARS repeater from Dacula during the October SET. I will check this out as soon as possible.

Now that the hot, humid weather is behind us, it's time to get out and enjoy nature with your radio!

73 de *David Harden, KJ4CMY*



Gwinnett ARES Highlights

By Karen Whited, AB4NW

Meetings are held the 4th Tuesday at 7:30 pm at the EOC on Hi Hope Road. If you are interested in emergency communications, contact Hall Collier W4IGE at w4ige@arrl.net.



The annual 10K race, on September 2, supports cystic fibrosis research and began at the Chamblee MARTA station down Peachtree to the Buckhead Station Shopping Center on the Buckhead Loop. There was also a 5K race which started from the Brookhaven Marta station. Eleven Gwinnett ARES volunteers staffed various positions throughout the course such as start and finish, water stations, EMS, race timer, pace car, SAG vehicle, and bus staging areas.

Many thanks go out to:



Hal, Jeff, Paul, and Jose with Miss Georgia 2019 Victoria Hill

Hal Collier W4IGE
Jeff Cutchins AB4HF
Russell Prevost AB4QQ
Lee Stone KT4LS
David Adcock KA4KKF
John Davis WB4QDX
Jose Jasso KE6IYD
Norm Schklar WA4ZXV
Earl Whatley AF4FG
Charlie Allport WS4TOT
Paul Farley K5PJF



HURRICANE DORIAN – Week of Sept 1

Larry Whited AB4NX was among the State ARES Mutual Assistance Team operators who staffed the State Operations Center (SOC) at GEMA in Atlanta ready to receive calls for assistance from areas that could have lost other means of communication. GEMA operators listened for assistance calls on multiple modes and frequencies as well as the D-STAR and *Georgia* EchoLink conference node 4544. The SOC was staffed 7am-7pm Monday through Wednesday. When it was determined the hurricane would not have a Georgia landfall, the SOC stood down mid-day on Thursday.



Mutual Assistance Team (MAT) operators also deployed to the Offsite Warning Point in Pickens County where they monitored the same frequencies as the SOC and stood ready to relay any HF messages that the SOC could not copy. They were ready to receive Winlink traffic and prepared to handle any general inquiries and reports that did not require GEMA assistance. Bill Hawkins WR1TR and Russell Prevost AB4QQ from Gwinnett ARES participated.



Russell AB4QQ left end.
Bill WR1TR right end.



GEORGIA GWINNETT COLLEGE Preparedness and Safety Fair

The college's 7th annual preparedness and safety fair was held on September 11. Thanks to Russell Prevost AB4QQ and Karen Whited AB4NW for manning our booth promoting ARES and amateur radio in general. Several students were interested in our upcoming Ham Cram.



AMATEUR RADIO SKILLS DAY - Sept 14

Georgia Public Safety Training Center, Forsyth

This event was offered by Georgia ARES for all amateurs interested in honing their operating skills. Hams took classes in feedlines, multimeters, mesh networks, power supplies, Winlink, ARES Connect, go-boxes, D-STAR, cables/connectors, soldering, digital net control, and deployment fundamentals.



Left to right: Hal Collier W4IGE, Russell Prevost AB4QQ, Glen Wendt W3WWT, Alan Murray W4AJM, Karen Whited AB4NW, Larry Whited AB4NX and Lee Stone KT4LS.

Net Managers Corner

Monday Night 2 Meter “Want, Swap, Sell, and Information Net”

GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club and we have the membership and awards to prove it. Our club is a very busy and active club and we use the Monday night net to get the information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people that make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only SEVEN primary people who serve as NCS for the GARS net every Monday night. In no particular order, they are:

Don - KW4AL	Ray - N4GYN	Bill - KK4AUA
David - KA4KKF	Kevin - KK4WOG	Chuck - KK4TKJ
Russell - AB4QQ		

As GARS Net Manager (Chuck KK4TKJ), I really need 26 people to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club.

The “Want, Swap, Sell Information Net” begins promptly at 19:30 every Monday night and runs about 45 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me at KK4TKJ@arrl.net. Sign up to help support the effort that makes GARS the great club that it is.

73 and see you on the Nets!

Chuck McCord, KK4TKJ

GARS Net Manager

GARS Membership Page

New GARS Members in September

Russell Dickerson (KN4HAE)
Christi Dickerson
Robert Eybers (KN4WBM)
Brandon Massengill (KN4YCY)
Tony Vitolo (W4AV)

New Members: 5

Total Members as of September 30, 2019
330

Join GARS members for our weekly breakfast gathering at 7:30 AM most Saturdays

at

**Golden Corral
2155 Riverside Parkway
Lawrenceville, GA 30043**

[\(Directions\)](#)

The following members are celebrating birthdays in October:

**HAPPY BIRTHDAY!!
From All of Us at GARS**

Laurence Andrus (KB4LWT)
Sheridan Bailey (N4GYN)
Scott Brown (KD4YDD)
Dale Burns (KI4MZO)
Alexis Carmona
Jonathan Dorminy (KN4LGM)
Dorothy Draa-Miller
Charles Eiland (WA4RVO)
Ken Evans (W4DU)
Joshua Garcia-barreto (KM4OMX)
Ellen Hawkins (KM4RRW)
Wilfred Kirk (N4WWK)
Kathy Kitz
Robert LaBerge (KC4BI)
Richard Lamb (KC4AJF)
Daniel Leahr (N8KCM)
Joel Levine (WA4HNL)
Vaden McDonald (NN4K)
Catherine Perry
Cathy Pierce (K1YMW)
Harold Prosser (KK1B)
Robert Pursley (WD4KQQ)
Allison Sullivan (KK4VLR)
Kent Thompson (W4PBX)
Michael Weathers (ND4V)
Glen Wendt (W3WWT)
Russ Willard (KA4UUB)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message.

To become a GARS member, or to renew your GARS membership, please visit our website—<http://www.gars.org>

To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please e-mail the Membership Committee - membership@gars.org

You can **renew or update** your Amateur Radio license information with the FCC at their website for free <http://wireless.fcc.gov/uls/index.htm?job=home>

To update your ARRL information, please visit their website - <http://www.arrl.org>

Membership Chair: Karen Albritton, KI4HPP
Committee Members: Dave Bruse, W4DTR, Pam Meridy, WB1AKQ

EXTRA! EXTRA!

Repeater Status

6M	currently down
147.075	Operational in Snellville
147.255	Operational in Snellville
224.580	Operational in Grayson
442.100	Operational at Goshen Springs
442.325	Operational in Buford
444.525	Operational in Snellville

Link remote receivers being added

L&M Mobility

Robert (Mike) Smith
5191 La Paloma Dr.
Lilburn, GA 30047
Phone (404)-509-3104
Smithrm70@hotmail.com

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GARS on Social Media

GARS has moved to Groups.io!



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<http://gars.org/groups.io>



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<http://gars.org/facebook>



Follow GARS on Twitter:
<http://gars.org/twitter>



Join GARS on YouTube:
<http://gars.org/youtube>

G A R S Volunteers

OFFICERS

John Davis, President	WB4QDX	
Sandy Jackson, Vice President	KJ4DRO	
Joe Biddle, Secretary	AD4PZ	
Pam Meridy, Treasurer	WB1AKQ	
Randy Collins, Program Manager	N4COR	

MANAGERS/COMMITTEE CHAIRS

Karen Albritton, Membership Chair	KI4HPP	
Dave Bruse, VE Team & Workshop Leader	W4DTR	
David Adcock, Webmaster and Field Day Chair	KA4KKF	
Ralph Pickwick, Apparel Manager and Education Chair	KJ4CNC	
Glen Wendt, TechFest Chair	W3WWT	
Bill Eggers, GARzette Editor	WB2RIS	
Eddie Foust, Repeater Chair	WD4JEM	
Mike Weathers, WAS / DXCC QSL Card Checker and Historian	ND4V	
Chuck McCord, Net Manager	KK4TKJ	
Mike Swiderski, Technical / RFI Advisor	K4HBI	
Joe Biddle, Winter Field Day Chair	AD4PZ	
Kyle Albritton, Multimedia Chair	W4KDA	
Don Stewart, Elmer Manager	KW4AL	
Dave Slotter, Georgia QSO Party Chair	W3DJS	

DIRECTORS AND TRUSTEES

Kyle Albritton, W4KDA		Rick Cobb, N4XYY	
Mike Weathers, ND4V		Bill Cherepy, WB4WTN W4GR Trustee	

GARS MEETING AND WORKSHOP MINUTES

Gwinnett Amateur Radio Society GENERAL Meeting Minutes 9/10/2019

President John Davis (WB4QDX) Opened the meeting at 7:00pm and Closed the meeting at 9:11pm EAA Facility, 690 Hanger Rd. Lawrenceville, GA.

Introductions and Visitors: Visitors were recognized and full Introductions of the [65] attendees followed.

Treasurer: Pam Meridy (WB1AKQ) Gave the Club financial report.

Membership Report: Karen Albritton (KI4HPP) reported for Karen that Membership is at [328].

Programs: Randy Collins (N4COR) Announced Upcoming Programs:

- **October** - Show and Tell
- **November** – Doing the Tail Twister and Enjoying Ham Radio Remotely.
- **December** – Holiday Party
- **January 2020** - Power Supplies

GARS Workshop - David (W4DTR) outlined the next few workshop sessions coming up:

- **September** – QRZ.com
- **October** – Radio Go Box

GARS Education – Ralph (KJ4CNC)
HamCram scheduled for November 16th and 23rd.

JOTA – Steve (WB4OGY) reminds us that Jamboree On The Air will be **October 19** – At the VFW in Lawrenceville for the World's Largest Scout Event. They'll be operating and running two merit badge classes. Requesting volunteer operators.

Repeater – David (KA4KKF) An amplifier is installed at the Tribble Mill location. The 'Cans' need tuned to correct the Transmit/Receive loss.

Maker Faire Atlanta – Norm (WA4ZXV) this year's maker faire is **September 28th and 29th**. Norm asks for volunteers to help out from 10:00-5:00. Email Norm at: WA4ZXV@arrl.net.

Stone Mountain Hamfest – November 2nd & 3rd.
Volunteers are needed and you can sign up on

GARS.org.

Memorial – An ARRL Memorial Brick was purchased for Nick (AB4CQ) to be placed in their memorial walk. When the replica brick is received, it will be presented to Nick's wife.

Elmer Program – Don (KW4AL) presented the details for a GARS Mentoring program and asks for volunteers to sign to be an Elmer for another Amateur Radio Operator.

Holiday Party – is set for Saturday December 7.

Break:.....

Program – Jim Stafford (W4QO) Morse Code presentation.

Submitted by: Joe Biddle (AD4PZ), GARS Secretary

Workshop Meeting Minutes 9/17/2019

Number in Attendance: 26

Workshop Topic:

QRZ: What is it and how can I get the most from it

Workshop Presenter:
Dave Slotter, W3DJS

Brief Summary:

An exploration of the QRZ website (<https://www.qrz.com/>) including: Advanced search capabilities by Name, Biography, County, Grid or DXCC with real-time examples; Capabilities of QRZ logging software with other software packages (i.e. LoTW); and, resources (paid & free) offered.

Submitted by Russell Prevost AB4QQ
GARS Workshop Committee
Workshop Secretary

ARRL CONTESTING INFO

From ARRL Contest Calendar

> For more information click the links <

October 2019

19-20 [EME - 50 to 1296 MHz](#)
21-25 [School Club Roundup](#)

November 2019

2-4 [Nov. Sweepstakes - CW](#)
16-17 [EME - 50 to 1296 MHz](#)
16-18 [Nov. Sweepstakes - Phone](#)

December 2019

6-8 [160 Meter](#)
14-15 [10 Meter](#)
15 [Rookie Roundup-CW](#)

January 2020

1 [Straight Key Night](#)
4 [Kid's Day](#)
4-5 [RTTY Roundup](#)
18-20 [January VHF Sweepstakes](#)

February 2020

10-14 [School Club Roundup](#)
15-16 [International DX – CW](#)

March 2020

7-8 [International DX– Phone](#)

April 2020

19 [Rookie Roundup – Phone](#)

(no ARRL contests in May)

June 2020

13-15 [June VHF](#)
20 [Kid's Day](#)
27-28 [Field Day](#)

July 2020

11-12 [IARU HF World Championship](#)

August 2020

1-2 [222 MHz and Up Distance Contest](#)
15-16 [10 GHz & Up – Round 1](#)
16 [Rookie Roundup – RTTY](#)

September 2020

12-14 [September VHF](#)
19-20 [10 GHz & Up - Round 2](#)
TBD [EME - 2.3 GHz & Up](#)

For more information:

<http://www.arrl.org/contest-calendar>

HAMFEST CALENDAR

10/11/2019 | [ARRL Florida State Convention, 54th Annual Melbourne Hamfest](#)

Location: Melbourne, FL
Type: ARRL Convention
Sponsor: Platinum Coast Amateur Radio Society
Website: <http://pcars.org>

10/18/2019 | [Delta Division Convention \(Hamfest Chattanooga 2019\)](#)

Location: East Ridge, TN
Type: ARRL Convention
Sponsor: Chattanooga Amateur Radio Club
Website: <http://w4am.net/hamfest-chattanooga-2018/>

10/26/2019 | [South Carolina Section Convention "Beachfest" 2019](#)

Location: Conway, SC
Type: ARRL Convention
Sponsor: Grand Strand Amateur Radio Club
Website: <http://www.w4gs.org>

11/02/2019 | [Georgia State Convention, Stone Mountain Hamfest](#)

Location: Lawrenceville, GA
Type: ARRL Convention
Sponsor: W4BOC Alford Memorial Radio Club, Gwinnett Amateur Radio Society
Website: <http://stonemountainhamfest.com/>

11/09/2019 | [HamJam](#)

Location: Alpharetta, GA
Type: ARRL Hamfest
Sponsor: North Fulton Amateur Radio League
Website: <http://hamjam.info>

For more information: <http://www.arrl.org/hamfests-and-conventions-calendar>
When searching by division, remember some states adjacent to GA are in different divisions:

Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC

GARS Events Calendar for 2019 & 2020

TechFest (www.techfest.info)	January 18, 2020
Winter Field Day	January 25&26, 2020
General HamCram	March 16&23
Dog Show Fundraiser	March 28 - 31
Georgia QSO Party	April 11&12, 2020
North metro area Fox Hunt	April
May Madness	May
Memorial Day Parade	May 25, 2020
ARC/KARC Hamfest	June 6, 2020
Field Day	June 27&28, 2020
Tech HamCrams	Jul 20&27, Nov 16&23
JOTA	October 19
Maker Faire (GARS Will Not Participate in 2019)	
Stone Mt. Hamfest	November 2&3
Holiday Party	December 7

**November GARS Meeting:
Doing the Tail Twister and
Enjoying Ham Radio Remotely**
By Ray Bailey, N4GYN

GARS Recurring Calendar

- ◆ 2nd Tuesday of the month at 7 pm (except December): Monthly Club Meeting
- ◆ 3rd Tuesday of the month at 7 pm (except December): Monthly Workshop
- ◆ 2nd Sunday of the Month at 2 pm: [GARS Ham Exam Session](#)
Fire Station #24
2735 Mall of Georgia Blvd
Buford, GA 30519
- ◆ Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater
- ◆ Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater
- ◆ Most Saturdays at 7:30 am: GARS Weekly Breakfast
Golden Corral Restaurant
2155 Riverside Parkway,
Lawrenceville, GA 30043

GARS CALENDAR OF EVENTS FOR OCTOBER 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
September 29	September 30	1	2	3	4	5 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
6	7 7:30 - 8:00 pm GARS 2m Net	8 5:00 - 6:30 pm Dinner 7:00 - 9:00 pm GARS Meeting	9	10	11	12 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
13 GARS VE Team Testing Session Starts at 2:00 pm	14 7:30 - 8:00 pm GARS 2m Net	15 5:00 - 6:30 pm Dinner 7:00 - 9:00 pm GARS Workshop	16	17	18	19 7:30 - 9:30 am Breakfast 9am - 3:30 pm JOTA at VFW Post 5255
20	21 7:30 - 8:00 pm GARS 2m Net	22	23	24	25	26 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
27	28 7:30 - 8:00 pm GARS 2m Net	29	30	31 HAPPY HALLOWEEN	November 1	November 2 7:30 - 9:30 am Breakfast STONE MTN HAMFEST DAY 1

Metro Testing Sessions

GARS publishes Metro Atlanta VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at <http://www.arrl-ga.org>.

First Sunday, ODD Months

2 pm (Jan, Mar, May, Jul, Sep, & Nov)
VEC: WCARS
Braselton Public Utility Building
4986 Highway 53, Braselton, GA
Contact: Roger Gibson, WB4T
(770) 271-4210 or (770) 712-9560
w4rlg@bellsouth.net

First Sunday, EVEN Months

2 pm (Feb, Apr, Jun, Aug, Oct, Dec)
VEC: WCARS
Hall County EOC
470 Crescent Dr. Gainesville, Ga.
Contact: Perry Roper, KO4RD
(770) 536-3056

Second Saturday

10:00 AM
Alpharetta North Park, Adult Activities Center
13450 Cogburn Rd, Alpharetta, GA 30004
Contact: Ian Kahn, KM4IK
E-mail: km4ik.ian@gmail.com

Third Saturday, ODD Months

VEC: ARRL
9:30 am (Appointments required, no walk-ins)
Stone Mountain Masonic Lodge
840 VFW Drive
Stone Mountain, GA 30083
Contact: Frank Haynes, KV4SP
Email: fhaynes@vatmom.net
(678) 467-3712

Second Sunday

VEC: W5YI
2 pm
Fire Station #24
Mall of Georgia Boulevard
Buford, GA 30519
Contact: Dave Bruse, W4DTR
E-mail: exams@gars.org

First Sunday, EVEN Months

VEC: WCARS and W5YI
2 pm @ Barrow Co. Emerg. Serv. Bldg
66 McElroy Street
Winder, GA 30680
Contact: Mike Wolcott, W4WYI
(404) 281-6581
E-mail: W4WYI@ARRL.net

(cont. next column)

Ham Exam Results

September Results

We had another good exam session on Sunday, September 8. We had nine applicants with the following results:

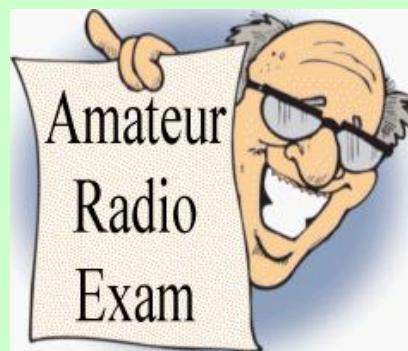
- 3 new Technician class
- 5 upgrades to General class.

Many thanks to the following VE's who made this session possible:

- Bob, K4CQO
- Russell, AB4QQ
- Richard, KM4SWL
- Allison, AB4YL
- Dale, AE8DL
- Frank, KV4SP
- Sid, N4NQ (Co-CVE)
- Bill, WB4WTN
- Dave, W4DTR (CVE)

73, *Don*, KK4NJM (Co-CVE)

GARS VE Team Leaders
E-mail: exams@gars.org



Fourth Tuesday

ARRL VEC
7 pm @ United Way Service Center
6279 Fairburn Rd., Douglasville
Contact: Jessie Clower, KB4WFK
(770) 942-6466

Fourth Sunday

2:30 pm Georgia Tech
VanLeer Elec. Building
Rm. W218, 777 Atlantic Dr.
For more information go to
www.w4aql.com and click on "Test Sessions"

Metro Club Meetings

First Tuesday

Kennehoochee ARC
Downtown Marietta
Fire Station #1, Training Room
112 Haynes Street
Marietta, Georgia 30060
Meeting begins at 7:00pm
Talk In 146.880(-)

First Thursday

Atlanta Radio Club
Georgia Red Cross HQ
1955 Monroe Dr., Atlanta
Meeting is at 7:30pm
Talk In -146.820(-)

N.E. Georgia ARC
Commerce Public Library
1344 South Broad Street, Commerce
Meeting is at 6:30pm
Talk In - 147.225(+), PL 123.0

Second Monday

Georgia Tech ARC
Room W218
Van Leer Electrical Engineering Bldg.
Georgia Tech Campus
Meeting at 7:00pm

Second Thursday

Alford Memorial Radio Club
Annistown Road Baptist Church
Annistown Rd & Spain Rd
Stone Mountain
Dinner at 6:00pm, Meeting at 7:30pm
Talk In - 146.760(-)

Second Saturday

North GA QRP Club
Board Room of The Shepherd Center
2020 Peachtree Rd, NW, Atlanta
at 10:00 AM

Third Tuesday

North Fulton Amateur Radio League
Alpharetta Recreation & Parks Dept
Alpharetta Adult Activity Center
13450 Cogburn Road
Alpharetta, GA 30004
meeting at 7:30pm
Talk In - 145.47(-)

For more information, go to:
<http://www.gars.org/>

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Mark KJ4VO
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Denise
Ken KI4BQS
Ray WN5FB
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